

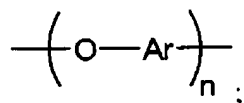
Serial No.: 10/808,264

PATENT APPLICATION
Docket No.: NC 96,200

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

1. (previously presented) A polyaromatic ether comprising the formula:

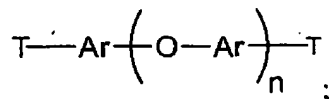


wherein Ar is an independently selected divalent aromatic radical with or without substituents containing one or more fused aromatic rings, one or more non-fused aromatic rings without intervening functional groups, or combinations thereof wherein the radical sites are on the same or different aromatic rings; and

wherein n is an integer greater than or equal to 7.

2. (currently amended) The polyaromatic ether of claim 1, wherein ~~the~~ each divalent aromatic radical is m- or p-phenylene.

3. (currently amended) An aromatic ether oligomer comprising the formula:



wherein Ar is an independently selected divalent aromatic radical with or without substituents containing one or more fused aromatic rings, one or more non-fused aromatic rings without intervening functional groups, or combinations thereof wherein the radical sites are on the same or different aromatic rings;

wherein T is a terminating group independently selected from the group consisting of -OH and -X;

wherein X is independently selected from the group consisting of Br and I; and

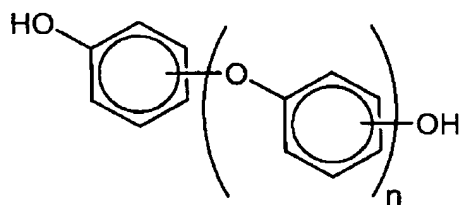
wherein n is an integer greater than or equal to 1.

Serial No.: 10/808,264

PATENT APPLICATION
Docket No.: NC 96,200

4. (original) The aromatic ether oligomer of claim 3, wherein n is less than or equal to about 100.
5. (original) The aromatic ether oligomer of claim 3, wherein n is selected from the group consisting of 2, 4, 6, and 8.
6. (original) The aromatic ether oligomer of claim 3, wherein both terminating groups are —OH; and n is an even integer greater than or equal to 2.

7. (original) The aromatic ether oligomer of claim 6, wherein the aromatic ether oligomer comprises the formula:

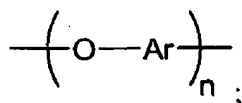


8-21. (cancelled)

Serial No.: 10/808,264

PATENT APPLICATION
Docket No.: NC 96,200

22. (currently amended) A process of preparing a polyaromatic ether comprising the formula:



wherein Ar is an independently selected divalent aromatic radical with or without substituents containing one or more fused aromatic rings, one or more non-fused aromatic rings without intervening functional groups, or combinations thereof wherein the radical sites are on the same or different aromatic rings;

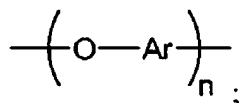
comprising the step of reacting a dihydroxyaromatic with a dihaloaromatic;

wherein neither the dihydroxyaromatic nor the dihaloaromatic is present in an excess amount; and

wherein the reaction is performed in the presence of a copper compound and a base.

23. (original) The process of claim 22, wherein the copper compound is selected from the group consisting of CuI and CuBr.

24. (currently amended) A process of preparing a polyaromatic ether comprising the formula:



wherein Ar is an independently selected divalent aromatic radical with or without substituents containing one or more fused aromatic rings, one or more non-fused aromatic rings without intervening functional groups, or combinations thereof wherein the radical sites are on the same or different aromatic rings;

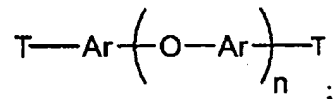
comprising the step of reacting a halohydroxyaromatic in the presence of a copper compound and a base.

25. (original) The process of claim 24, wherein the copper compound is selected from the group consisting of CuI and CuBr.

Serial No.: 10/808,264

PATENT APPLICATION
Docket No.: NC 96,200

26. (currently amended) A process of preparing an aromatic ether oligomer comprising the formula:



wherein Ar is an independently selected divalent aromatic radical with or without substituents containing one or more fused aromatic rings, one or more non-fused aromatic rings without intervening functional groups, or combinations thereof wherein the radical sites are on the same or different aromatic rings;

wherein T is a terminating group independently selected from the group consisting of -OH and -X;

wherein X is independently selected from the group consisting of Br and I;

wherein n is an integer greater than or equal to 1;

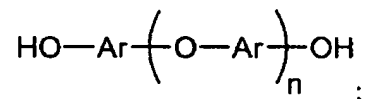
comprising the step of reacting a dihydroxyaromatic with a dihaloaromatic;

wherein the reaction is performed in the presence of a copper compound and a base; and

wherein either the dihydroxyaromatic or the dihaloaromatic is present in an excess amount.

27. (original) The process of claim 26, wherein the copper compound is selected from the group consisting of CuI and CuBr.

28. (original) The process of claim 26, wherein the dihydroxyaromatic is present in an excess amount to form a hydroxy-terminated aromatic ether oligomer comprising the formula:



wherein n is an even integer greater than or equal to 2.

Serial No.: 10/808,264

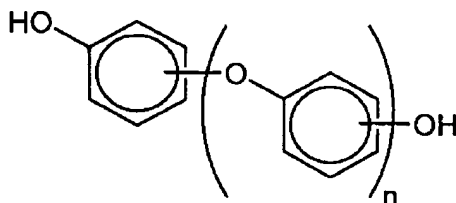
PATENT APPLICATION
Docket No.: NC 96,200

29. (original) The process of claim 28,

wherein the dihydroxyaromatic is selected from the group consisting of
resorcinol, hydroquinone, and combinations thereof;

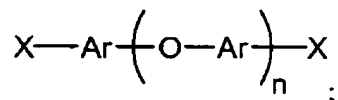
wherein the dihaloaromatic is selected from the group consisting of m-
dibromobenzene, p-dibromobenzene, m-diiodobenzene, p-diiodobenzene,
m-bromoiodobenzene, p-bromoiodobenzene, and combinations thereof;
and

wherein the hydroxy-terminated aromatic ether oligomer formed by the process
comprises the formula:



30. (original) The process of claim 26,

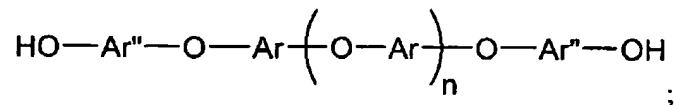
wherein the dihaloaromatic is present in an excess amount to form a halo-
terminated aromatic ether oligomer comprising the formula:



wherein n is an even integer greater than or equal to 2.

31. (original) The process of claim 30, further comprising the step of

reacting the halo-terminated aromatic ether oligomer with a dihydroxyaromatic to form a
hydroxy-terminated aromatic ether oligomer comprising the formula:



wherein Ar'' is a divalent aromatic radical.

32-55. (cancelled)

Serial No.: 10/808,264

PATENT APPLICATION
Docket No.: NC 96,200

56. (previously presented) The process of claim 22 wherein the base is selected from the group consisting of cesium carbonate and potassium carbonate.
57. (previously presented) The process of claim 24 wherein the base is selected from the group consisting of cesium carbonate and potassium carbonate.
58. (previously presented) The process of claim 26 wherein the base is selected from the group consisting of cesium carbonate and potassium carbonate.